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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,945	03/30/2001	Michael Joseph Beranek	END920000146US1	8166

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EXAMINER

BAUTISTA, XIOMARA L

ART UNIT	PAPER NUMBER
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2173

DATE MAILED: 03/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/821,945

Applicant(s)

MICHAEL J. BERANEK

Examiner

X L Bautista

Art Unit

2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |                                                                                                                                        |                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                        | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: _____                                                |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-6 and 9-14 are rejected under 35 U.S.C. 102(b) as being anticipated by *Wolpaw et al* (US 5,638,826).**

Claims 1 and 9:

Wolpaw discloses a method and system for navigating in a window environment. The system includes a processor 16, a display (video screen 11), and a window environment (user can control cursor movement), (abstract; col. 1, lines 6-12; col. 4, lines 44-67; col. 5, lines 1-67; col. 6, lines 1-5). Wolpaw control circuit (input circuits) coupled to the processor adapted to position a pointer on the display (col. 5, lines 1-40). Wolpaw teaches that the user can control a cursor using brain waves and the input circuit may detect electromyographic (EMG) and electroencephalographic (EEG) signals (abstract; col. 3, lines 39-67; col. 4, lines 1-8; col. 9, lines 64-67; col. 10, lines 1-4).

Claims 2 and 10:

See claim 1. Wolpaw teaches an operating having a (brain interface)

graphical user interface (user can control a cursor in a display screen (col. 5, lines 1-18).

Claims 3 and 11:

See claim 2. Wolpaw teaches a software having a graphical application (col. 5, lines 1-18).

Claims 4 and 12:

See claim 1. Wolpaw teaches input circuits (abstract; col. 3, lines 39-67; col. 4, lines 1-8; col. 9, lines 64-67; col. 10, lines 1-4).

Claims 5 and 13:

Wolpaw teaches input circuit for directional navigation (col. 7, lines 56-59) and selection (col. 7, lines 40-46).

Claims 6 and 14:

See claim 1. Wolpaw teaches circuits adapted to receive electromyographic signals from electrodes attached to a person (abstract; col. 3, lines 39-67; col. 4, lines 1-8; col. 9, lines 64-67; col. 10, lines 1-4).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be

patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**4. Claims 7, 8 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Wolpaw and Humphrey* (US 6,171,239 B1).**

Claims 7 and 8:

See claim 1. Wolpaw teaches input circuits adapted to receive electrode signals. Wolpaw teaches that the electrodes are attached to the scalp of the user (abstract; col. 4, lines 57-67). Wolpaw does not teach a chip having a plurality of electrodes connected to the input circuits. However, Humphrey discloses a system and method for controlling external device by signal derived from the nervous system. Humphrey teaches that the system receives signal from sensors implanted directly in the brain of a patient (abstract; col. 1, lines 6-10). An electronic microchip is implanted in the brain and coupled to an electrode array (col. 4, lines 44-54). Humphrey teaches that the electrical signals may be used to control external devices such as computers and computer displays (col. 3, lines 10-30). Therefore, it would have been obvious to one ordinarily skilled in the art at the time the invention was made to include Humphrey's teaching of implanting a chip in a user's brain to control external devices in Wolpaw's communication system because signal are collected directly from the brain and can be exteriorized and used for the control of devices by people with severe physical handicap.

Claim 15:

See claims 1 and 7. Wolpaw teaches cursor control, receiving signal by a plurality of electrodes coupled to a user's scalp (abstract; col. 1, lines 6-12; col. 3, lines 39-67; col. 4, lines 1-8, 44-67; col. 5, lines 1-67; col. 6, lines 1-50; col. 9, lines 64-67; col. 10, lines 1-4). Humphrey teaches receiving neurotropic signals by a plurality of circuits coupled to a control circuit coupled to a signal processor (col. 3, lines 10-30, 54-67; col. 4, lines 1-67; col. 17, lines 4-10).

Claim 16:

See claim 15. Humphrey teaches that the microchip can generate different signals (col. 3, lines 10-30; col. 4, lines 44-67; col. 5, lines 1-40; figs. 5 and 6).

Claim 17:

See claims 1 and 7. Wolpaw/Humphrey teach that signal may be activated by a mental process (Humphrey: abstract; col. 1, lines 6-10; col. 4, lines 44-54).

Claim 18:

See claim 7. Humphrey teaches mental process is thought (abstract; col. 1, lines 6-10, 14-65; col. 3, lines 10-30).

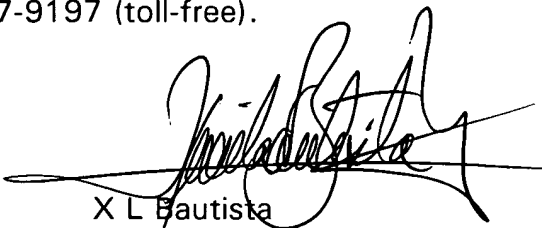
***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to X L Bautista whose telephone number is (703) 305-3921. The examiner can normally be reached on Monday-Thursday (8:00-18:00), Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W Cabeca can be reached on (703) 308-3116. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



X L Bautista  
Patent Examiner  
Art Unit 2173

xlb  
March 5, 2004